# **OPERATOR'S MANUAL**

# **DieHard**

# **Ultra-Slim Travel Inverter 120**

Converts 12V DC Power to 110V AC Household Electrical Power + USB (5V)





## **CAUTION:**

Read all Safety Rules and Operating Instructions, and follow them with each use of this product.

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

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## **DIEHARD ONE-YEAR FULL WARRANTY**

When operated and maintained according to all supplied instructions, if this DieHard product fails due to a defect in material or workmanship within one year from the date of purchase, return it to any Sears store or other DieHard outlet in the United States for free replacement.

This warranty does not include fuses, which are expendable parts. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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FOR CUSTOMER ASSISTANCE OR REPLACEMENT PARTS, CALL TOLL-FREE BETWEEN 7 AM TO 4:30 PM CT MONDAY THROUGH FRIDAY: 1-800-SEARS-64 (1-800-732-7764)

#### IMPORTANT: READ AND SAVE THIS SAFETY AND INSTRUCTION MANUAL.

#### 1. IMPORTANT SAFETY INSTRUCTIONS

Before using your Travel Inverter 120, read and understand this Owner's Manual.

- 1.1 Keep the inverter well ventilated in order to properly disperse heat generated while it is in use. Make sure that there are several inches of clearance around the top and sides and do not block the slots of the inverter.
- **1.2** Make sure the inverter is not close to any potential source of flammable fumes, gases or clothing.
- **1.3** Keep the inverter dry.
- **1.4** DO NOT allow the inverter to come into contact with rain or moisture.
- 1.5 DO NOT operate the inverter if you, the inverter, the device being operated or any other surfaces that may come in contact with any power source are wet. Water and many other liquids can conduct electricity, which may lead to serious injury.
- **1.6** Do not place the inverter on or near heating vents, radiators or other sources of heat.
- 1.7 Do not place the inverter in direct sunlight. The ideal air temperature for operation is between 50° and 80°F.
- **1.8** Do not use the inverter near an open engine compartment.
- **1.9** Only connect the travel inverter to a 12-volt accessory outlet.
- 1.10 Make sure the AC plug connection is tight.
- **1.11** Do not modify the AC or USB receptacle in any way.
- **1.12** Use only 15 amp fuses.
- 1.13 Incorrect operation of your inverter may result in damage and personal injury. WARNING: The inverter output is 110V AC and can shock or electrocute the same as any ordinary household AC wall outlet.

**WARNING:** Pursuant to California Proposition 65, this product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

#### 2. TRAVEL INVERTER 120 PRODUCT FEATURES



- 1. Blue LED Indicator
- 2. 3-prong AC Outlet
- 3. USB Port
- 4. Power Cable Plug
- 5. Power Cable
- 6. 15A Fuse (inside of unit)
- 7. Protective Case
- 8. Velcro Strips (not shown)

#### 3. BEFORE USING TRAVEL INVERTER 120

It is important to know the continuous wattage of the device you plan to use with the inverter. The Travel Inverter 120 must be used with devices drawing 120 watts or less. If the wattage is not marked on the device, an estimate can be made by multiplying the AC input current (Amps) by the AC voltage (110V).

Devices like TVs, fans or electric motors require additional power to start (commonly known as the "starting or peak power"). The Travel Inverter 120 can supply a momentary surge in wattage; however, even devices rated less than the maximum 120 watts can exceed the inverters surge capability and cause an automatic overload shutdown.

Make sure the device you are using is compatible with a modified sine wave inverter.

## 4. OPERATING INSTRUCTIONS

#### 4.1 Connect Inverter Power Cable:

- Plug the included power cable into the inverter. Note, the plug will only fit into the outlet one way.
- Push the 12V end (cigarette plug) of the power cable firmly into the 12V accessory outlet. The LED indicator light should glow BLUE verifying the inverter is receiving power. If the LED indicator is not on, check the connection and fuses.

## 4.2 Connecting and using the AC or USB device:

- Make sure that the device to be operated is turned OFF.
- Plug the device into the Travel Inverter AC outlet or USB port.
- Turn the device on. If the device doesn't work and the LED blinks, refer to section 5.

**Note:** A "buzzing" sound emitted from a sound systems is the result of ineffective filters in the sound system. This can be resolved by purchasing a sound system with a higher quality power supply or higher quality filter.

## 4.3 Mounting the Travel Inverter 120 in your car:

- Peel and stick the Velcro strips on back of holder
- Attach holder to desired location in vehicle
- · Slide inverter into case

## 5. LED INDICATOR AND SHUTDOWN PROTECTION

The LED glows BLUE automatically when plugged into a 12V DC source and will shut off or blink under the following conditions:

- **5.1** When the power input from the vehicle's battery drops to approximately 10 volts, low battery shutdown occurs and inverter shuts off.
- 5.2 When the power input of the vehicle's battery exceeds 15 volts, high voltage overload protection occurs.
- 5.3 The continuous load demand from the equipment or device being operated exceeds 120 watts.
- **5.4** The case temperature becomes hot (exceeds 145°F).
- 5.5 Reset: After shutdown occurs, determine and correct problem before resetting.

### 6. POWER SOURCE

Your average automobile or marine battery at full charge will provide an ample power supply to the inverter for approximately 3 hours when the engine is off. The actual length of time the inverter will function depends on the age and condition of the battery and the power demand being placed by the device being operated with the inverter.

Turn OFF the device plugged into the inverter before starting the engine. To maintain battery power, run the engine every 2 to 3 hours for approximately 10 minutes to recharge the battery. The Travel Inverter 120 draws very low amperage when not in use, and should be unplugged to avoid battery drain.

### 7. USAGE EXAMPLES

Device Type	Estimated Wattage
Cell Phones, MP3 Players	10 Watts
Portable CD Players	50 Watts
Laptop Computers	90 Watts
Video Games	100 Watts

#### 8. **SPECIFICATIONS** Maximum Continuous Power 120 Watts Surge Capacity (Peak Power) 240 Watts No Load Current Draw <0.4 Amp, 400mA Wave Form Modified Sine Wave Input Voltage Range 10.5 - 15.5V DC Low Battery Alarm N/A 110 - 125V AC Output Voltage 9.9V - 10.8V DC Low Battery Shutdown 15.0V - 16.0V DC High Battery Shutdown Optimum Efficiency >85% AC Receptacles One, NEMA 5-15 (USA) 110V AC 3-Prong **USB Port** One, 5V, 0.5A Dimensions 3.75"H x 2.75"W x .875"D **Product Weight** Approximately .4 lbs. 15 Amp (250V) Fuse

# 9. REPLACEMENT PARTS

**15 A Fuse:** - 3900000190

Power cable: 0699000329

# 10. TROUBLESHOOTING

PROBLEM: LOW OR NO OUTPUT VOLTAGE			
REASON	SOLUTION		
Poor contact at terminal	Unplug and reinsert the Ultra-Slim Travel Inverter 120.		
Equipment being operated is drawing too much power	Use a higher capacity inverter or do not use the device.		
Inverter is too hot (thermal shut down)	Allow inverter to cool. Check for adequate ventilation. Reduce the load on the inverter to rated continuous power output.		
Blown Fuse in Power Cable	A blown fuse is usually caused by reverse polarity or a short circuit within the device being operated. To replace:		
	<ul> <li>Disconnect the device immediately.</li> <li>Find the source of the problem and repair it.</li> <li>Install a new 15-amp fuse. Do not tighten the fuse cap too far; finger tight is sufficient.</li> </ul>		
	NOTE: Installing a fuse higher than 15- amps may cause damage to the inverter.		
Inverter may be defective	Call 1-800-SEARS-64 for troubleshooting assistance.		